

### 3905 Century Club Mobile Shootout 2014 – De Pere, Wisconsin



This year's 3905 Century Club Mobile Shootout was held at the Brown County Fair Grounds in De Pere, Wisconsin. It was the best venue to date for any Shootout we've held in the Century Club as the grassy field used was about six wavelengths wide and four and one half wavelengths from transmitter to receiver. In addition, the weather was perfect with just enough cloud coverage to provide shade whenever it was getting a little warm.

Many thanks again go out this year for the help I had during the Shootout. Once again, David, WN1F helped in recording the scores, Dave, N0MNO and Bill, K6YEK did the hard work of carrying around the Bird Watt Meter and coordinating the transmissions with the receive site through their thorough 2 Meter transmissions, Dean, N7XG who made sure everyone was signed up on the official entrant form, Pete, NJ9T who provided the test transmissions periodically to gauge the state of the Shootout range and a big thank you to Keith, KS9WI for providing the best Shootout venue in our thirteen years of Shootouts. I simply could not do it without these guys and it seems that every year, multiple someones step up to help. That's just the nature of the people that show up at our yearly Eyeball Weekend.

An extra special thanks goes to Ron, WB7ASC for his superb photography skills without which this Shootout report would be very bland. They say a picture is worth a thousand words – well Ron, you save me 34,000 words in this report. Thank you so much!!!

Also once again, I must give a big "Shout Out" to Ron Douglas, NI7J the owner of Scorpion Antennas who generously donated an SA680 antenna and two Scorpion Cap Hats. No other donor to our yearly prize pool has been as consistent and as generous as Scorpion Antennas – we are truly blessed.

For additional info on this year's Shootout as well as what is being planned for future events, please see the Vol 2014, #4 edition of the Centurion newsletter. Also, don't forget to view the many photos of the entire Eyeball weekend over at Dean, N7XG's site at http://www.3905eyeball.org/

#### 1<sup>st</sup> Place and Top Gun Don - KD8NNU

Few things are as rewarding as entering a contest for the first time ever and taking away first place and that is exactly what Don did this year. His diligence paid off big time. Don's effective installation was a direct result of paying attention to detail starting off with a large, well-bonded vehicle and putting together a great mounting scheme that put his antenna in the middle of his truck bed with his main coil well above the cab roof. He followed that up by using Mix 31 beads to take care of any common current issues that are ever present in any mobile installation. Of course his correctly mounted, killer Cap Hat also greatly added to the overall efficiency of his mobile system too.

Don made the comment that he still has work to do because everyone else is going to make improvements to their installations in hopes of dethroning him next year, so he had better make some changes also. I'm really not sure what he can do to improve, but maybe he'll try an eight foot cap hat. We'd all like to see a road-worthy one of those!

Nice going, Don...
....I know how you feel!!!





Vehicle	Antenna	Mast	Whip	Cap Hat	Mounting	Score	Shootout
Model	Model	Length	Length	Configuration	Location	dBm	Rank
2013 Ram 1500	Scorpion SA680 Shorty	28"	60"	Highly Modified W8UZZ Configuration	Home Brewed Mid Bed Between Bed Rails	-13.12	

#### 2<sup>nd</sup> Place and Big Gun Glen - WTOA

I'm sure Glen feels like, "Always a bride's maid, never a bride" after his second consecutive 2<sup>nd</sup> Place finish. He had some stiff competition this year, but he finished a mere .46 dBm behind 1<sup>st</sup> Place. Last year Glen was 3.15 dBm behind 1<sup>st</sup> Place, so he is closing the gap. In the years that Glen has entered our Shootouts, he has finishes of 2<sup>nd</sup>, 3<sup>rd</sup>, 3<sup>rd</sup>, 6<sup>th</sup>, 6<sup>th</sup>, 5<sup>th</sup>, 2<sup>nd</sup> and again 2<sup>nd</sup> this year which makes Glen one of our most consistent performers. I really can't recall anyone who works harder year to year trying to improve their standing in the Shootout. I fully expect him one year to show up with a used Sherman Tank. You just never know, but I, like everyone else, enjoy seeing Glen every year.





Vehicle	Antenna	Mast	Whip	Cap Hat	Mounting	Score	Shootout
Model	Model	Length	Length	Configuration	Location	dBm	Rank
2006 Chevy Silverado	Scorpion SA6160	47"	?	Home Brewed	Front Mid Bed	-13.58	2 <sup>nd</sup> Big Gun

#### 3<sup>rd</sup> Place and Big Gun Jim - N50HL

No one, apparently, was more surprised than Jim that he finished 3<sup>rd</sup>. After a disappointment in Nebraska a couple of years ago, where he finished in 8<sup>th</sup> place due to an antenna failure, he proved this year that ingenuity, skill and understanding can pay off. His home brewed, single band antenna was well designed and well installed and it payed off with a 3<sup>rd</sup> place finish this year - just .33dBm behind 2<sup>nd</sup> place. Maybe Jim should write a QST article about his antenna.



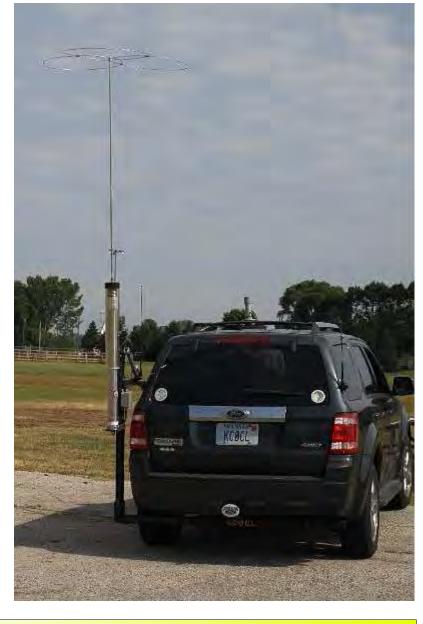


Vehicle	Antenna	Mast	Whip	Cap Hat	Mounting	Score	Shootout
Model	Model	Length	Length	Configuration	Location	dBm	Rank
2001 Dodge Caravan	Home Brewed Hustler Type	48"	22"	DX Engineering HotRodz	Center Top	-13.95	3 <sup>rd</sup> Big Gun

## 4<sup>th</sup> Place and Big Gun Cal - KCOCL

Cal's installation was virtually unchanged from years past except for the addition of a mobile SWR Meter from PalStar. He has vowed to make a big change for next year, so everyone above him better watch out.





Vehicle	Antenna	Mast	Whip	Cap Hat	Mounting	Score	Shootout
Model	Model	Length	Length	Configuration	Location	dBm	Rank
2002 Ford Escape	Scorpion SA680	39"	60"	48" Diameter Home Brewed	Home Brewed Left Rear	-14.03	4 <sup>th</sup> Big Gun

#### 5<sup>th</sup> Place and Big Gun Russ - W2UJ

Russ' ex-Police Interceptor vehicle, which was well bonded when he bought it, continues to provide great results. He did make a slight mast change for this year and he continued to place in the upper echelons of the Shootout despite the new blood with their high dollar antennas.



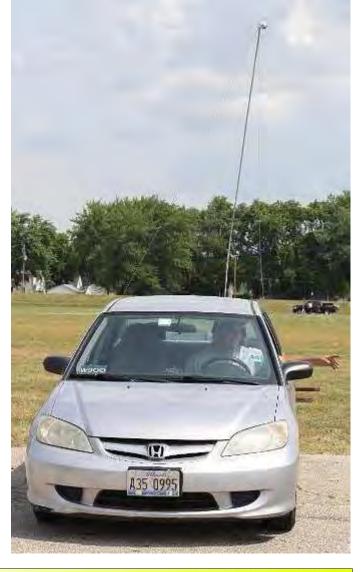


Vehicle	Antenna	Mast	Whip	Cap Hat	Mounting	Score	Shootout
Model	Model	Length	Length	Configuration	Location	dBm	Rank
2002 Crown Victoria	Hustler	96"	60"	Hustler R <mark>esonator</mark> @ 90° at Top of Whip	Hitch Receiver	-14.94	5 <sup>th</sup> Big Gun

#### 6<sup>th</sup> Place - Tie Carl - W900

Buffalo Chip aficionado, Carl, was barely beaten out of 5<sup>th</sup> place (by .03 dBm). I'm fairly confident that a Buffalo Chip under his vehicle would have put him into 5<sup>th</sup> place as the additional ground plane probably would have done the job. Too bad he received the chip after the Shootout. At any rate, I'm sure we haven't heard the last of this incident and I'm looking forward to what next year may bring. After all, Carl's area of the country has lots of hot air and baloney sauce to draw from and with a whole year to put a plan of retaliation together, the 2015 Eyeball and Shootout will be interesting.





Vehicle	Antenna	Mast	Whip	Cap Hat	Mounting	Score	Shootout
Model	Model	Length	Length	Configuration	Location	dBm	Rank
2009 Honda Civic	Hustler	118"	24"		Hitch Receiver	-14.97	6 <sup>th</sup> (Tie)

#### 6<sup>th</sup> Place - Tie Steve - KC4YB0

The winner and Top Gun at the 2011 Connecticut Shootout finished this year tied for 6<sup>th</sup> place. The competition is getting tougher each year in our club. I'd like to draw a little analogy here to some professional sports teams. There are teams out there that year after year develop the best talent in their sport and you've heard it said before that, "any of the second and third string players on these great teams would be starters on any other team." I feel much the same about some of the participants in our Shootouts. In any other Shootout, most of our participants would be winners and that certainly holds true for Steve and for most of this year's entrants. As everyone fine tunes their mobile installations year after year, we're ending up with the cream of the Mobile Hamdom crop. At least that's how I feel about you guys. Seems as though on any given Saturday Shootout, anyone could win. Steve will be making a small change for the next Shootout. I'm betting he'll move up in the ranks.





Vehicle	Antenna	Mast	Whip	Cap Hat	Mounting	Score	Shootout
Model	Model	Length	Length	Configuration	Location	dBm	Rank
1999 Chrysler Town & Country	Tarheel 200A	48"	72"	Home Brewed	Hitch Receiver	-14.97	

#### 8<sup>th</sup> Place - Tie Pete - NJ9T

Pete's original Predator antenna fell apart like mine did on my way to the Vista, CA Eyeball in 2009, but unlike me, Pete was talented enough himself to procure the right parts (better quality parts) and rebuild it. He ended up with a Gear Motor antenna that will last him many more years. It's a work of art, Pete!





Vehicle	Antenna	Mast	Whip	Cap Hat	Mounting	Score	Shootout
Model	Model	Length	Length	Configuration	Location	dBm	Rank
2003 Ford Escape	Home Brewed 2" Gear Motor Type	55"	36"	3-Leaf Clover	Left Rear	-15.4	8 <sup>th</sup> (Tie)

#### 8<sup>th</sup> Place - Tie Jim - KB3PU

Jim was in a group of three that tied for 8<sup>th</sup> place. Still, they were down from the first place score by just a hair less than half an S-Unit. You'd never hear that difference on the air, but "Who knows what evil lies in the hearts of men?" (or "Who knows what signals lie in the hearts of men's antennas?") - The Spectrum Analyzer knows!!! And like N5SV, Steve in Texas used to say, "And that's the name of that tune."





Vehicle	Antenna	Mast	Whip	Cap Hat	Mounting	Score	Shootout
Model	Model	Length	Length	Configuration	Location	dBm	Rank
2004 Honda Accord	Tarheel 200A	48"	72"		Hitch Receiver	-15.4	8 <sup>th</sup> (Tie)

#### 8<sup>th</sup> Place - Tie Keith - KS9WI

Prior to the Shootout, Keith's Shootout Cap Hat had an argument with a tree, so he was not able to use it which probably would have been the tie breaking setup. As they say, "The best laid plans of mice and men......" There's always next year. Keith may not have scored like he wanted to in the Shootout, but he scored top honors with everyone at the Eyeball by putting together a noteworthy Eyeball weekend. Lots of work went into it and Keith's (and his Wife's and Daughter's) attention to detail gave everyone in attendance something to remember.

Thanks Keith!





Vehicle	Antenna	Mast	Whip	Cap Hat	Mounting	Score	Shootout
Model	Model	Length	Length	Configuration	Location	dBm	Rank
2012 Chevy Sedan	Tarheel 200A	48"	60"	6 Spoke	Hitch Receiver	-15.4	8 <sup>th</sup> (Tie)

#### 11<sup>th</sup> Place Donnie - KG4ZOD

Donnie's fairly unique setup prohibited him from competing in the 2011 Connecticut Shootout. Since then, we have been letting each participant use their own transmitter monitored closely by a Bird Watt Meter. So Donnie was able to test this year and ended up in 11<sup>th</sup> place, but still only half an S-Unit down from the Top Gun. I hope you all realize how close these competitions are getting. Less than 2 S-Units separate the Top Gun from the Pop Gun. If Donnie could get his Hamstick just a little higher, it could make a big difference. All that said, I'm sure he had great fun working the nets on the way back home from the Eyeball. W9OO tells me that Donnie's biggest problem is finding state lines. If Carl is really that concerned, he should buy Donnie a GPS. HA!





Vehicle	Antenna	Mast	Whip	Cap Hat	Mounting	Score	Shootout
Model	Model	Length	Length	Configuration	Location	dBm	Rank
2006 Honda Minivan	Hamstick				Left Rear Mid Hatch	-16.21	11 <sup>th</sup>

#### 12<sup>th</sup> Place Karl - KCOMS

Karl finished in 12<sup>th</sup> place this year – a mere half an S-Unit down from the Top Gun. His highly polished vehicle probably kept the RF Electrons from getting any foot hold with which to launch into the Ether – a rusty vehicle would probably have served him better, but then he wouldn't have looked as good. His style certainly got the attention of some of the more unsavory thugs hanging around our motel, but thankfully there were no incidents that involved any of our club members (that I know of). Plenty of arrests took place during the weekend, though, as each night the police led another (or two) off in handcuffs. If any of them had been into snorting RF, Karl could have helped them. As it stands, Karl uses the RF his mobile puts out to give many contacts to many net check-ins wherever he is.





Vehicle	Antenna	Mast	Whip	Cap Hat	Mounting	Score	Shootout
Model	Model	Length	Length	Configurati <mark>on</mark>	Location	dBm	Rank
A Highly Polished 2009 Honda Accord	Hustler	60"	36"		Trunk Deck	-16.29	12 <sup>th</sup>

## 13<sup>th</sup> Place Mick - ACOTP

Mick was the 11<sup>th</sup> place finisher in NE in 2012 in his only other appearance in one our Shootouts. With more and more coming on board with a better understanding of sound installation practices and then doing the the work required, it really has tightened up the scoring. For instance, in 2012, Micks score was about 30% down from the Top Gun. This year, despite finishing two places lower in the standings, he was only 23% down from the Top Gun. If I could get a 7% return on my money every year, I be very

pleased.





Vehicle	Antenna	Mast	Whip	Cap Hat	Mounting	Score	Shootout
Model	Model	Length	Length	Configuration	Location	dBm	Rank
2000 GMC Sierra	Hustler	52"	24"		Right Rear Bed	-17.12	13 <sup>th</sup>

# 14<sup>th</sup> Place Dwight - WF4H

Dwight's Toyota Tacoma's pickup bed is plastic. He knew that would be an issue, so he covered the floor with ¼" thick, sheet aluminum and then bonded it to the truck frame at all four corners. The rest of his truck was bonded equally well. The whole object of bonding is to get our vehicles to present one big metal mass as half of a capacitor to couple to the ground underneath the vehicle. What we all learned is that we need as BIG of a metal mass as possible. Note the vehicles at the top of the heap this year. That said, Dwight's score was less than an S-Unit down from the Top Gun. If you didn't get to see Dwight's installation, you missed a work of art. You would be hard pressed to find any wiring and behind his rear seat is 500 watts of RF producing QSO power that is installed in an equally elegant manner. No one should have any trouble hearing Dwight.





Vehicle Model	Antenna Model	Mast Length			Mounting Location	Score dBm	Shootout Rank	
2013 Toyota Tacoma	Scorpion SA680 Black Widow	39"	36"	Scorpion	"C" Beam Behind Tool Box Mid Bed	-17.8	14 <sup>th</sup>	

### 15<sup>th</sup> Place Ray - WBOPYF

Ray made up some ground this year and instead of being down over an S-Unit to the Top Gun like last year, he was less than an S-Unit down to the Top Gun this year. Ray's nice installation continues to give us all contacts on the nets and I'm sure Ray has fun with it too.





Vehicle	Antenna	Mast	Whip	Cap Hat	Mounting	Score	Shootout
Model	Model	Length	Length	Configurati <mark>on</mark>	Location	dBm	Rank
2012 Chrysler Town & Country	Hustler	52"	36"		Left Rear Hatch	-18.13	15 <sup>th</sup>

### 16<sup>th</sup> Place Jerry - ACORL

Jerry's installation consisted of a Hi-Q antenna and an Egg-Beater Cap Hat that was mounted far too close to his main coil. This has the effect of increasing his capacitance to his main coil (as well as lowering the coil Q) instead of increasing his system's overall capacitance to ground. He would have benefited from some additional height of his main coil above the roof line. Still, he was only an S-Unit and a half down from the Top Gun and I'm sure he makes plenty of contacts.





Vehicle	Antenna	Mast	Whip	Cap Hat	Mounting	Score	Shootout	
Model	Model	Length	Length	Configurati <mark>on</mark>	Location	dBm	Rank	
2006 Ram	Hi-Q	55"	36"	Hi-Q Egg Beater	Left Rear Bed	-23.9	16 <sup>th</sup>	

#### 17<sup>th</sup> Place Tim - WOYV

Tim's antenna suffers what any antenna suffers on a full sized van – no ability to take advantage of the huge ground plane that the van represents. In order to do so, the antenna would have to be mounted in the center of the roof, but that's just not practical. So Tim's installation is a compromise just like most others. Still, there may be room for some improvement like getting the main coil higher above the roof line But we've all worked Tim (and family members) on numerous occasions and I know he and his family have a great time doing so too.





Vehicle	Antenna	Mast	Whip	Cap Hat	Mounting	Score	Shootout
Model	Model	Length	Length	Configuration	Location	dBm	Rank
2005 Chevy Express	Hi-Q	30"	108"	Hi-Q Egg Beater	Hitch Receiver	-24.86	17 <sup>th</sup>

#### 3905 Century Club Mobile Shootout

2014

Callsign	Name	Vehicle	Antenna	Mast	Whip	Cap Hat	Mounting	Score	
		Model	Model	Length	Length	Configuration	Location	dBm	Place
KD8NNU	Don	2013 Ram 1500	Scorpion SA680 Shorty	28"	60"	Highly Modified W8UZZ Configuration	Home Brewed Mount Mid Bed Between Bed Rails	-13.12	1
WT0A	Glen	2006 Silverado	Scorpion SA6160	47"	?	Home Brewed	Front Mid Bed	-13.58	2
N5OHL	Jim	2001 Dodge Caravan	Homebrew Hustler Type	132"	?	DX Engineering HotRodz	Center Top	-13.95	3
KC0CL	Cal	2002 Ford Escape	Scorpion SA680	39"	60"	48" Diameter Home Brewed	Home Brewed Left Rear	-14.03	4
W2UJ	Russ	2002 Crown Victoria	Hustler	96"	60"	Hustler Resonator @ 90° at Top of Whip	Hitch Receiver	-14.94	5
W900	Carl	2009 Honda Civic	Hustler	118"	24"		Hitch Receiver	-14.97	6
KC4YB0	Steve	1999 Chrysler Town and Country	Tarheel 200A	48"	72"	Home Brewed	Hitch Receiver	-14.97	6
NJ9T	Pete	2003 Ford Escape	Homebrew 2" Gear Motor Type	55"	36"		Left Rear	-15.4	8
KB3PU	Jim	2009 Honda Accord	Tarheel 200A	48"	72"		Hitch Receiver	-15.4	8
KS9WI	Keith	2012 Chevy Sedan	Tarheel 200A	48"	60"	6 Spoke	Hitch Receiver	-15.4	8
KG4ZOD	Donnie	2006 Honda Minivan	Hamstick				Left Rear Mid Hatch	-16.21	11
KC0MS	Karl	A Highly Polished 2009 Honda Accord	Hustler	60"	36"		Trunk Deck	-16.29	12
AC0TP	Mick	2000 GMC Sierra	Hustler	52"	24"		Right Rear Bed	-17.12	13
WF4H	Dwight	2013 Toyota Tacoma	Scorpion SA680 Black Widow	39"	36"	Scorpion	"C" Beam Behind Tool Box Mid Bed	-17.68	14
WB0PYF	Ray	2012 Chrysler Town and Country	Hustler	52"	36"		Left Rear Hatch	-18.13	15
AC0RL	Jerry	2006 Ram	Hi-Q	55"	36"	Egg Beater	Left Rear Bed	-23.9	16

108"

30"

Hi-Q Egg Beater

Hitch Receiver

-24.86

17

2005 Chevy Express

Hi-Q

W0YV

Tim